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## Urinary incontinence - a problem of modern society

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### Abstract

Urinary incontinence is the involuntary leakage of urine through the urethra. The World Health Organization indicates that incontinence is a very important social problem. In addition to a significant deterioration of the quality of life, this ailment significantly affects the social, professional and family life of people suffering from it. Statistics indicate that this problem affects about 5 million people in the Poland, both women and men. There are a number of risk factors, of which the most common are: postpartum period, menopausal period in women, prostatic hypertrophy in men and obesity, severe physical work and smoking in both groups. Physiotherapy is an important element of conservative treatment. The most common therapies are: biofeedback, pelvic floor training and electrostimulation

**Key words:** urinary incontinence, modern problem

## **Introduction**

The International Continence Society defines urinary incontinence as a condition, in which uncontrolled urination occurs. According to statistics, incontinence is a discomfort, to which over 200 million people suffer in developed and developing countries. The World Health Organization indicates that incontinence should be considered as a significant social problem. The incidence of the phenomenon in the literature varies significantly. According to various authors, it ranges from 15% to 60%.

This disorder is exceptionally embarrassing for patients. It significantly affects the quality of life, reduces well-being, but also adversely affects many aspects of family, work and social life. Every third woman visits a gynecologist for this type of discomfort. This dysfunction concerns increasingly young people. It is a big problem for women at every stage of their lives.

## **Risk factors**

There are several different classifications of risk factors for urinary incontinence. The most frequently mentioned risk factors for urinary incontinence are: obesity, smoking, physical work, diabetes, chronic constipation and extreme sports. In women also delivered births and surgery in the minor pelvis, as well as hormonal changes. While in men, predisposing factors for incontinence are overgrowth of the prostate gland, as well as previous surgical procedures. This simple division should be extended.

Particularly noteworthy is the division according to Bump. He classified the following risk factors: predisposing, triggering, contributing and decomposing. The group of predisposing factors includes: genetic, neurological, anatomical, racial and cultural factors, as well as collagen building disorders. The second group of risk factors - triggering - included births and surgical operations, nerve and muscle damage as well as the consequences of radiotherapy. Among the factors promoting the occurrence of NM attention should be paid to: diet and intestinal dysfunctions, obesity, level of physical activity, menopause, infection and treatment of mental diseases and lung diseases. The fourth category of factors - decompensation includes among others: age, dementia, mental retardation, environmental diseases.

## **Types of urinary incontinence**

An uncontrolled leakage of urine is a subjective symptom, which according to current terminology is associated with the urine collection phase.

There are three types of NM: Stress urinary incontinence, loss of urine, in situations of increasing pressure in the abdominal cavity, i.e. activities such as coughing, sneezing and

physical activity. Exercise-type stress incontinence occurs in 50% of women reporting NM. This is a fairly large problem of women after childbirth, as well as women in the perimenopausal period.

Urge incontinence (so-called urgent), in which even a small amount of urine in the bladder causes a feeling of urge and urination. Most often associated with uncontrolled bladder spasms or excessive excitability of the detrusor muscle, which usually results from neurogenic causes. Mixed-type urinary incontinence, in which there are symptoms of both stress and urgent urinary incontinence.

### **Physiotherapeutic diagnosis**

The diagnosis of NM includes medical history and physical examination. Epicrisis must be placed by a urologist, after a full diagnostic examination. Physiotherapy is equally important in a physiotherapeutic office. It allows you to assess the severity of the ailments, evaluate the fluid intake, micturition and defecation in order to introduce their possible modification, as well as to assess the progress of the rehabilitation process.

A physiotherapeutic examination consists of a full patient and ailment interview as well as an assessment of the micturition log, as well as a physical examination:

- neuromuscular diagnosis (EMG)
- assessment of the pelvic floor muscles
- cough test
- insert test

### **Conservative treatment**

Conservative treatment of urinary incontinence covers, above all: lifestyle modification. The influence on the NM risk promoting factors is invaluable. Usually, the most important goals are to reduce weight, stop smoking, and regulate meals and the supply of liquids. It is extremely important to make patients aware of how many negative consequences they have with constipation. During the first physiotherapeutic visit, patients receive instruction in the field of prophylaxis and correctness of performing physiological functions, i.e., micturition and defecation.

The most well-known physiotherapeutic methods in the treatment of urinary incontinence are biofeedback, electrostimulation, pelvic floor muscle training as well as magnetic field and behavioral therapy.

Immediately after the prevention and modification of lifestyle, care should be taken to learn how to properly perform pelvic floor muscle exercises. The aim of the therapy is to obtain the correct tension (both at rest and during contraction) within the pelvic floor to such an extent that you can consciously control urination and exercise effortlessly. If the patient is able to tighten the muscles properly, you have to enter the exercises in different starting positions, it is very important to modify the duration of the tension and the number of repetitions. Correctly performed muscle tone of the pelvic floor should be used during daily activities,.

Extremely useful methods in the treatment of patients with incontinence are also: electrostimulation, or electrical stimulation of pelvic floor muscles through the use of specially created for this: vaginal probe for women and rectal probe for men. Electrostylum is one of the passive methods of conservative treatment of pelvic floor muscle dysfunction. Electrical training of crotch muscles is designed to force muscles by stimulating them to contraction using electrical impulses. Stimulating the muscles for contraction, makes the patient realize that it is possible. It also significantly improves the perception of pelvic floor muscles. In addition, thanks to stimulation, the contractile force, the length of the maximum contraction and the resting tension are increased.

Biofeedback, or biological feedback. Thanks to the appropriate equipment, feedback about the muscle condition is monitored. The device consists of an intravaginal probe, which collects information on the pelvic floor muscles and electrodes affixed to the patient's skin, which indicate whether synergists work synergistically, undesirable during pelvic floor training. Studies indicate that the effectiveness of electrostimulation in combination with biofeedback is greater than just electrostimulation.

Behavioral therapy is particularly important in the case of urinary incontinence. However, it is used in all types of NM. It consists of urinating at set times, attempts to calm and calm down the bladder, and delaying going to the toilet, in order to extend the time between the vapors. The literature indicates that the bladder training effectiveness reaches even 90% (reduction or resolution of symptoms).

## **Summary**

Physiotherapy is an indispensable element of comprehensive therapy of dysfunctions in the patient. In the vast majority of cases, it guarantees improvement and often complete healing. Awareness about the possibilities of pelvic floor dysfunctions is very important. All the effects achieved in this area significantly translate into improvement of the patient's quality of life.

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